Hepatitis Headlines

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Viral Hepatitis Surveillance and Prevention Unit, Michigan Department of Health and Human Services
www.michigan.gov/hepatitis

In this issue

Welcome Janelle!

Janelle Stokely was recently hired as the new Viral Hepatitis Epidemiologist. Here is a little about Janelle in her own words:

My name is Janelle Stokely and I am excited to begin positively impacting health in the state of Michigan. I have been a Michigander my whole life so I am excited to help make a difference in the state I was born and raised. I recently graduated from the University of Michigan with my Masters in Public Health, Go Blue! I will be getting married in September of 2016, so be expectant of a name change next year. I am an avid animal lover and currently have an orange cat named Dexter and an Australian Shepard mix puppy named Darwin. I am very excited and ambitious to work with Michigan Department of Health and Human Services.

Janelle will be working on maintaining and evaluating viral hepatitis data quality and using data to monitor trends and inform prevention efforts. She can be reached at StokelyJ@michigan.gov. Please help us welcome Janelle!

KNOW MORE HEPATITIS™

Perinatal Hepatitis C Virus

There are currently an **estimated 23,000 to 46,000 children** living in the U.S. with chronic hepatitis C virus (HCV). Up until 1992, the most common mode of transmission of HCV to children was through blood transfusion, blood products or organ transplantation. Since the blood supply and organs are now screened for, the most common mode of transmission for children is mother-to-child transmission, which is also referred to as perinatal transmission or vertical transmission.

In HCV-positive women, it is estimated that the rate of **perinatal transmission is 4-6%**. The mechanism for which perinatal transmission occurs is not well understood; therefore, no prevention methods are available. However, it is known though that there is an increased risk for HCV transmission if the mother is co-infected with HIV. Moreover, **HCV is not a recommended prenatal screening test** and testing typically only occurs if the mother identifies risk factors associated with HCV transmission. So if the HCV status of the mother is unknown, or no risk factors are identified, the infant is likely to go untested.

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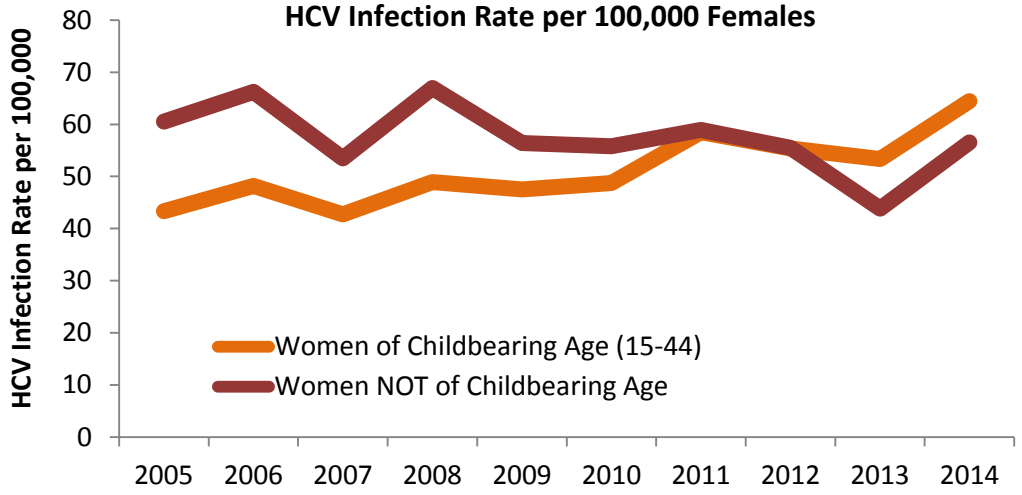


Help-4-Hep App

Help-4-Hep has created a new app to help those who are infected with hepatitis C. The app is free and available for mobile phones (both iOS and Android) or via the web. The app will help patients record their lab results, track their symptoms, remember to take their medications, and connect with supporters. For more information please visit http://www.help4hep.org/app/.

Help-4-Hep is a non-profit organization that first became known among the hepatitis C community for their toll-free hotline. Callers can speak confidentially with a peer counselor to ask questions about hepatitis C and receive both information and support. The hotline can be reached at 877-Help-4-Hep or 877-435-7443 from 9am to 9pm Eastern Time Monday through Friday.

-Kim Kirkey

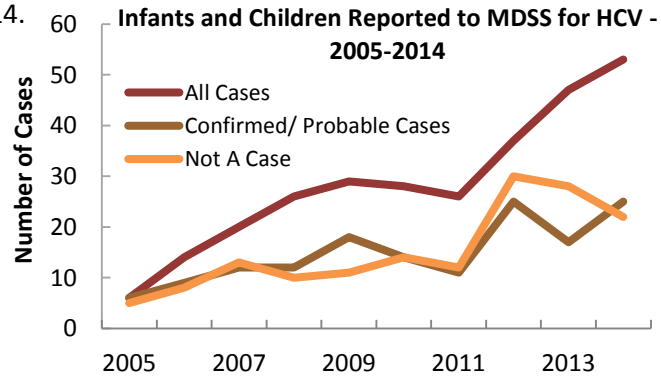
Perinatal Hepatitis C (continued from page 1)

As was documented in our previous newsletter, HCV infection among young adults continues to rise. This increase, largely thought to be due to the concurrent opioid and heroin epidemics, is equally as prevalent in females as males. As the volume of HCV-positive women giving birth rises, we expect to see a growing number of infants born with HCV. We looked to examine trends in HCV testing among children reported to the MDSS and determine if testing was conducted according to the American Association for the Study of Liver Diseases (AASLD) recommendations.

The American Association for the Study of Liver Diseases (AASLD) recommends different types of tests depending on the age of the child. In infants greater than 8 weeks old, but less than 18 months old, infants should have an HCV RNA test, since they will most likely still have their mothers HCV-antibodies and could yield a false-positive result. This test should be repeated after the child is 12 months old. On the other hand, if the child is 18 months or older, an HCV antibody test is appropriate since maternal antibodies should no longer be present in the child's body.

To meet the CDC surveillance definition for inclusion as a case of HCV an infant 18 months of age or younger must have a positive HCV nucleic acid test. For those under 18 months of age an HCV antibody is not sufficient and those should be closed as 'not a case'. See HCV Case Classification Flowchart.

The chart on page 1 shows that women of childbearing age (as we defined as being 15-44 years of age) have a growing burden of HCV infection while the rate among non-childbearing age females was relatively stable. Somewhat surprisingly, the rate among women of childbearing age was actually equal or higher than the rate among female "Baby-Boomers" from 2011-2014.



Between 2005 and July of 2015 there were a total of 319 children less than 10 years old reported to MDSS. We can draw two primary conclusions from these cases 1) it is clear that many infants are not being tested for HCV in accordance with AASLD's clinical recommendations and 2) there remains a high level of misclassification of these cases in MDSS. Of the 319 children, only about 25% were tested following AASLD's recommendations and in MDSS about 42% were incorrectly classified as a confirmed or probable HCV case.

Based on these findings, MDHHS recommends that local health jurisdictions continue to ensure infant and child labs are classified correctly (HCV Case Classification Flowchart). In addition, the report also highlighted the need for efforts to be implemented to improve providers' awareness of AASLD testing guidelines for infants and children. Because our surveillance data suggests that these cases will become more common, in the near future MDHHS hopes to release a comprehensive clinical guideline and reference to reinforce AASLD recommendations. -Emily Goerge

New Hepatitis C Case Definition (2016)

In June of 2015 the Council of State and Territorial Epidemiologists (CSTE) unanimously approved a new case definition for Hepatitis C Virus (HCV). The full position statement can be found on CSTE's website **here**. The anticipation is that CDC will fully endorse the new case definition by October of 2015 and MDHHS will plan to implement the new criteria to count cases for national notification beginning in January of 2016.

The new criteria are much simplified from previous HCV case definitions. A confirmed case must have a positive HCV nucleic acid test (NAT) such as a quantitative or qualitative HCV RNA result or genotype. Probable cases will be those with no NAT and only a positive HCV antibody. To meet the criteria for acute the client must have acute onset of symptoms and ALT>200 or jaundice. A chronic case is one that is positive for HCV but does not meet the acute case definition. There is one exception; if an individual seroconverts within 12 months (a negative hepatitis test within 12 months prior to a positive HCV test) the case would be classified as acute regardless of symptoms or ALT levels.

As you may be able to tell, there are several major changes to the **current (2012) case definitions**:

- No requirement for negative Hepatitis A and Hepatitis B IgM results
- Elimination of the signal-to-cutoff ratio for HCV antibody results
- Lowering of the ALT threshold for acute cases (previously was 400)
- Elimination of ALTs to meet the Chronic, Probable case definition
- Seroconversion changed from 6 months to 12 months

The goal of the new definition was to streamline the case definition criteria, which hopefully will result in fewer classification errors and more consistently measured and reliable statistics for national-level surveillance. In addition, these criteria more closely resemble clinical criteria for HCV infection and should be much simpler for disease investigators to apply to cases reported in MDSS. However, because the threshold for meeting both an acute and chronic case are being lowered it is likely that these changes will result in an even greater volume of cases.

In the coming months we hope to work with laboratories and hospitals to ensure they are reporting all HCV results, whether they are reporting electronically or hand-entering, in accordance with the **Communicable Disease Reporting Requirements**. Also, please keep an eye out for updated case classification documents and flowcharts at **www.mi.gov/hepatitis** and **www.mi.gov/cdinfo**.

-Joe Coyle

Preventing Healthcare-Associated Viral Hepatitis Infections

Last newsletter we mentioned our ongoing efforts to develop a new webpage for a collection of injection safety-related modules. We are pleased to announce that the full complement of training modules are now available at www.mi.gov/injectionsafety.

The seven modules were designed using Prezi, overlaid with voice overs from the Viral Hepatitis Unit staff, and then uploaded to YouTube in small clips. Each recording is about 10 to 15 minutes in duration. Topics covered include safe injection preparation and administration, safe diabetes care, cleaning and disinfection, drug diversion, and sustaining results over time.

These modules are designed to be a resource for healthcare professionals and facilities, especially those where dedicated trainings and infection control staff are not available. We know don't always have several hours free for training, so we hope the episodic nature of the modules make them more palatable.

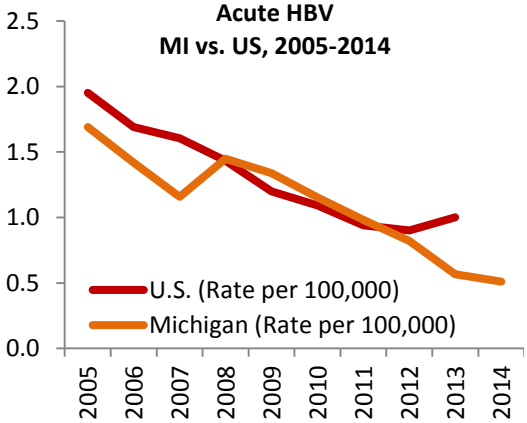
Please send any feedback to us at MDCH-Hepatitis@michigan.gov.

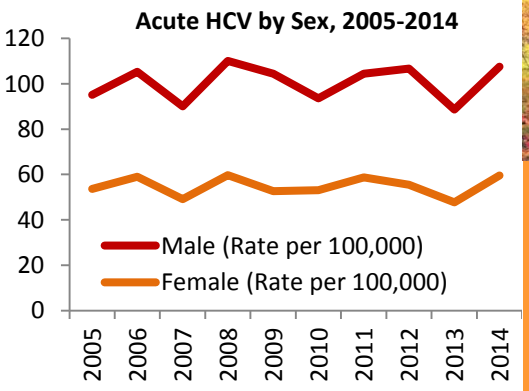
-Chardé Fisher

Viral Hepatitis Annual Surveillance Report

The **2014 MDHHS Viral Hepatitis Annual Report** has been departmentally approved for distribution can be found at **www.michigan.gov/hepatitis**. The report looks specifically at Hepatitis B and C (both acute and chronic) infections reported through the Michigan Disease Surveillance System. Disease trends are examined by age, race, sex, geographic area, and risk behaviors.

New to this year's report is a more robust section on the socio-demographic characteristics of the Michigan population as a whole, a detailed examination of the epidemic of HCV in young adults, descriptive statistics of viral hepatitis and HIV co-infections, additional viral-hepatitis related morbidity and mortality trends, and updated and more comprehensive data appendices that separates viral hepatitis and injection drug use trends by county, local health jurisdiction, and region. This year we also took additional measures to remove Department of Corrections cases from county case counts so infection rates are better representative of true population trends.





Thanks to **MDHHS Vital Records**, **MDHHS Office of Recovery Oriented Systems of Care**, **MDHHS HIV Surveillance**, and the **United Network of Organ Sharing** for providing data for this report.

Some highlights from this year's report:

- Acute HBV infections continue to decline similar to national trends
- The rate of chronic HBV infection in Asians (110 cases per 100,000) dwarfs that of whites (3.8) and blacks (15.2)
- Acute HCV cases remain relatively unchanged and similar to US rates
- Chronic HCV infection is more common in males (108 cases per 100,000) than females (60)
- HCV and markers of injection drug use continue to trend upward in the young adult population
- Liver cancer incidence and mortality, direct and indirect viral hepatitis-related mortality, and liver transplants are trending up

We are always looking for your input, so if there are any suggestions for future surveillance reports or requests for additional information please email **MDCH-Hepatitis@michigan.gov**.

-Janelle Stokely

Save the Date

Oct / Nov – Fall MDHHS Immunization Conferences

10/21-10/23 – MSIPC Fundamentals

10-31 – 11/4 – APHA Conference

11/12 – MIDS Fall Conference

Helpful Links

www.michigan.gov/hepatitis

www.michigan.gov/injectionsafety

www.michigan.gov/hepatitisb

www.michigan.gov/cdinfo

www.michigan.gov/hai

CDC Hepatitis

Know More Hepatitis Campaign

Know Hepatitis B Campaign

CDC Hepatitis Risk Assessment

Hepatitis A

Hepatitis B

Hepatitis C

USPSTF

AASLD

Institute of Medicine Report

One and Only Campaign

Injection Safety Resources

Hepatitis Occupational Exposure Guideline

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